

# Plan Review Checklist: New Commercial Structures and Additions



This list is provided as a guide for the most common requirements for information to be included on all plan submittals for new commercial structures and additions for the City of Sterling Heights. This will include hotel/motels and apartments under the scope of the Michigan Building Code. All items may not apply to a particular project and conversely more information may be required for certain projects.

## Construction Documents

1. Submit digital plans to [review@sterlingheights.gov](mailto:review@sterlingheights.gov) or two (2) sets of site, architectural, structural, electrical, and plumbing and mechanical drawings. Site plans should include all building and structures on the property, fire separation distances to the property lines, accessible parking and accessible route. All plans should indicate North direction and should show the actual address(s) and suite numbers if applicable.
2. Submit a completed use permit application.
3. Drawings shall consist of a single sheet size, no larger than 24 x 36.
4. No ½ size drawing will be accepted.
5. Drawings shall be sealed by a State of Michigan design professional. Signature on the first page if the set is bound with index.
6. Drawings shall be fully dimensioned and list the occupancies of all rooms and spaces.
7. Provide a pdf copy of structural calculations and architectural and structural plans and a soil report prepared by a licensed architect or engineer.
8. Provide documentation of finish ratings for all finish materials in accordance with Chapter 8 of the Michigan Building Code.
9. Provide flame spread and smoke developed index of all foam plastics and details of required thermal barrier.
10. Provide a list of deferred submittals.
11. For prefabricated structures, provide a copy of the plans for the prefabricated structure, approved by the State of Michigan, Bureau of Construction codes, Plan Review Division and the appropriate Certificate of Acceptability from the same. 1972, PA 230 Section 9, MCL125.1519

## Building Plan Submittal Requirements

1. List codes currently in effect.
  - a. If the Michigan Rehab Code is being used, list as the primary code and provide method used for compliance.
2. List occupancy classification (use group). If mixed use, please list the option elected. Provide a key plan showing.
3. List type of construction.
4. Provide an egress plan showing in sufficient detail location, size and character of all portions of the means of egress including the path of exit discharge to the public way. Details shall include, but not be limited to the tabular calculations for occupant loads in accordance with 1004.1.2, required width of egress in accordance with 1005.1 and provided widths of egress and number of exits required/provided. MBC 2015, 107.2.3 For assembly occupancies, please highlight "net areas"
5. Provide height and area information showing compliance with T504.3, T504.4, T506.2 and section 506 of the MBC 2015.

6. Provide number of floors.
7. Provide sealed truss drawings if applicable (may be listed as a deferred submittal).
8. Indicate if fire suppression (include type), fire alarm or fire detection will be installed.
9. Provide a summary of fire-resistance requirements for building elements and exterior walls for the type of construction in accordance with tables 601 and 602 of the current Michigan Building Code.
10. Provide plan of required fire resistance rated elements including building elements (T601/602), corridors, stair enclosures, incidental occupancies and vertical openings, sleeping and dwelling room separations. Note type of assembly (i.e. fire wall, fire barrier, etc.)
11. Provide section drawings for all required fire-resistance rated assemblies which represent the method of continuity and supporting construction.
12. Provide UL assemblies or other method of approval for all fire resistance rated assemblies.
13. Provide method of protection for required fire-resistance ratings of structural steel.
14. Indicate locations and fire-resistance ratings of all fire doors, fire shutters, fire and smoke dampers and fire-resistance rated glazing.
15. Provide manufacturer's written installation instructions for fire and smoke dampers. (May be listed as a deferred submittal)
16. Provide documentation for any required Sound Transmission Class ratings for applicable walls. (dwelling/sleeping units)
17. Provide documentation for required Sound Transmission Class ratings and Impact Insulation Class ratings for all applicable floor/ceiling assemblies.
18. Provide locations for all required hazardous glazing locations and the type of glazing to be used.
19. Provide section drawings for all walls, floors and roof.
20. Provide a door and window schedule including hardware as applicable.
21. Provide a furniture/fixture layout.
22. Provide details for all required stair and walkway guards including attachment methods.
23. Provide details for all stair/ramp handrails.
24. Provide locations of all exit signs and egress lighting and note if emergency power is required for egress lighting and method of providing emergency power. Also, if required, provide emergency powered egress lighting at the exterior landings of all exit doors.
25. Provide a table listing all deferred submittals.

## Fire Department Plan Submittal Requirements

1. 2024 International Fire Code with references, appendices and local amendments shall be listed as the governing/referenced code on plans.
2. Plans shall have the scope of work listed and a complete and accurate code analysis.
3. Exterior elevations of structures, width of fire access roads, turning radii and FDC/hydrant locations shall be on site plans.
4. Fire apparatus access roads shall comply with chapter 5 and appendix D of the 2024 IFC. Please note special considerations for buildings over 30' in height pertaining to road widths.
5. Commodity classification and quantity of storage materials shall be provided to the fire department. Design features and layout of storage systems and shelving shall be provided. High-piled combustible storage shall comply with chapter 32 of the 2024 IFC and requires a separate permit. Please refer to the building department's high-piled storage protocol.
6. Deferred plans shall be listed on construction documents. Where work will eventually require the installation of, or modification to, fire alarms or suppression systems, conditional approval of the construction permit is based on

the eventual receipt of fire alarm/suppression system plans. Refer to 2021 Michigan Building Code 107.3.4.1 Deferred Submittals.

7. Fire alarm annunciators and manual pull stations shall be installed by the front entrance of the building.
8. Suppression systems in strip malls shall have a shut-off valve installed to isolate that system from the rest of the building and an exterior A/V device in the rear of that address.
9. The AHJ may require a third-party review of submittals at the AHJ's discretion - 2024 IFC 104.2.2 Technical Assistance. Third-party reviews are required for the following: All high hazard group H occupancies, high-piled or high rack storage permits, occupancies that use or store class 3, 4 or high-hazard commodities and occupancies that use or store group A, B or C plastics. Please refer to fire prevention bulletin P20-018 for more information.

## Electrical Plan Submittal Requirements

1. Provide a complete electrical layout.
2. Provide service information and location.
3. Provide a riser diagram.
4. Provide Load calculations.
5. Provide compliance data for Michigan Uniform Energy Code 2015.

## Plumbing Plan Submittal Requirements

1. Provide information on minimum fixture requirements in accordance with Chapter 4 of the Michigan Plumbing Code.
2. Provide a complete plumbing layout.
3. Provide underground details and riser diagram.
4. Provide a water distribution diagram.
5. Provide a complete fixture layout.

## Mechanical Plans Submittal Requirements

1. Provide a complete duct layout.
2. Provide ventilation air calculations showing compliance with the Michigan Mechanical Code.
3. Provide information on equipment sizing.
4. Provide gas meter location and gas pipe layout.
5. Provide line diagram including shaft or damper locations for dryer ducting and bathroom and kitchen exhaust when ducts will penetrate rated assemblies.

## Hazardous Materials

If hazardous materials as defined by the Michigan Building Code and International Fire Code as amended by the City of Sterling Heights will be stored or used in the structure, we will be required to submit a report identifying the maximum expected quantities of hazardous material to be stored, used in a closed system and used in an open system and subdivided to separately address hazardous material classification categories based on Table 307.1(1) and 307.1(2) MBC 2015, 414.1.3 This report must be provided by qualified person. Occupancies that use or store 3, 4 or high hazard commodities will require a third party review.

## Special Inspections

Provide as statement of special inspection in accordance with Michigan Building Code Chapter 1704.3.1 of the Michigan Building Code. Assignment of the special inspector(s) may be a deferred submittal.

## Energy Information

Provide the compliance path and documentation for compliance with the Michigan Uniform Energy code. This should include information for building envelope, power and lighting, heating, ventilation and air conditioning and service water heating.

## Accessibility

Provide an accessibility plan. Plan should include but not be limited to showing accessible route, accessible entrances and exits, parking and passenger loading facilities, toilet and bathing facilities and other required accessible elements. MBC 2015, 1103.1

For R1 and R2 please provide total number of units and number of accessible, Type A and Type B units as applicable. List unit numbers corresponding to the accessible, Type A and Type B units.